

**STATEMENT UNDER 37 CFR 3.73(b)**Applicant/Patent Owner: Aptina Imaging CorporationApplication No./Patent No.: 7,154,136 Filed/Issue Date: December 26, 2006Entitled: ISOLATION STRUCTURES FOR PREVENTING PHOTONS AND CARRIERS FROM REACHING ACTIVE AREAS AND METHODS OF FORMATIONAptina Imaging Corporation, a Corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.  
(The extent (by percentage) of its ownership interest is \_\_\_\_\_ %)

in the patent application/patent identified above by virtue of either:

- A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☒ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

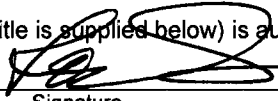
1. From: Bryan G. Cole et al. To: Micron Technology, Inc.  
The document was recorded in the United States Patent and Trademark Office at Reel 015010, Frame 0537, or for which a copy thereof is attached.
2. From: Micron Technology, Inc. To: Aptina Imaging Corporation  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☒ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

  
\_\_\_\_\_  
Signature

December 16, 2008

Date

Thomas J. D'Amico  
Printed or Typed Name

(202) 420-2232  
Telephone Number

Attorney for Assignee  
Title

## PATENT ASSIGNMENT AGREEMENT

### **1. Definitions**

(a) "Agreement" shall mean this Patent Assignment Agreement.

(b) "Assignee" shall mean **Aptina Imaging Corporation**, a Cayman Islands corporation with offices at c/o Citco Trustees (Cayman) Limited, Regatta Office Park, West Bay Road, Grand Cayman, Y1-1205, Cayman Islands.

(c) "Assignor" shall mean **Micron Technology, Inc.**, a Delaware corporation with offices at 8000 South Federal Way, Boise, ID 83707.

(d) "Effective Date" shall mean October 3, 2008.

(e)



(f)



(g) "Imaging Patents" shall mean those patents identified in ATTACHMENT "A" hereto, including, without limitation, all divisions, continuations, continuations-in-part, reissues, reexaminations, and all foreign counterparts thereof, and which may issue thereon or in connection therewith after the Effective Date of this Agreement.

(h) "Imaging Patent Applications" shall mean those filed patent applications identified in ATTACHMENT "B" hereto, including, without limitation, all patents, divisions, continuations, continuations-in-part, reissues, reexaminations, and all foreign counterparts which may issue thereon or in connection therewith after the Effective Date of this Agreement.

(i) "Semiconductor Patents" shall mean those patents identified in ATTACHMENT "D" hereto, including, without limitation, all divisions, continuations, continuations-in-part, reissues, reexaminations, and all foreign counterparts thereof, and which may issue thereon or in connection therewith after the Effective Date of this Agreement.

(j) "Semiconductor Patent Applications" shall mean those filed patent applications identified in ATTACHMENT "E" hereto, including, without limitation, all patents, divisions, continuations, continuations-in-part, reissues, reexaminations, and all foreign counterparts which may issue thereon or in connection therewith after the Effective Date of this Agreement.

(k) [REDACTED]

2. [REDACTED]

(a) Subject to the terms and conditions of this Agreement, and subject to the rights of others existing as of the Effective Date of this Agreement if any, Assignor, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby sells, assigns, and transfers to Assignee its entire right, title and interest in and to the Imaging Patents, including all rights to causes of action and remedies related thereto (including the right to sue for past, present or future infringement of rights related to the foregoing and the right to collect damages therefor). Assignor hereby authorizes and requests the Commissioner of Patents of the United States, and any other official of the United States and any country foreign to the United States whose duty it is to issue or record patents, to issue the Imaging Patents to Assignee and to record assignment of the Imaging Patents to Assignee.

(b) Subject to the terms and conditions of this Agreement, and subject to the rights of others existing as of the Effective Date of this Agreement if any, Assignor, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby sells, assigns, and transfers to Assignee its entire right, title and interest in and to the Intellectual Property rights in the Imaging Patent Applications. Assignor hereby authorizes and requests the Commissioner of Patents of the United States, and any other official of the United States and any country foreign to the United States whose duty it is to issue or record patents, to record assignment of the Imaging Patent Applications to Assignee.

(c) [REDACTED]

(d) Subject to the terms and conditions of this Agreement, and subject to the rights of others existing as of the Effective Date of this Agreement if any, and subject further to the restrictions on the Semiconductor Patents set out below, Assignor, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby sells, assigns, and transfers to Assignee its entire right, title and interest in and to the Semiconductor Patents, including all rights to causes of action and remedies related thereto (including the right to sue for past, present or future infringement of rights related to the foregoing and the right to collect damages therefor). Assignor hereby authorizes and requests the Commissioner of Patents of the United States, and any other official of the United States and any country foreign to the United States whose duty it is to issue or record patents, to issue the Semiconductor Patents to Assignee and to record assignment of the Semiconductor Patents to Assignee.

(e) Subject to the terms and conditions of this Agreement, and subject to the rights of others existing as of the Effective Date of this Agreement if any, [REDACTED], Assignor, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby sells, assigns, and transfers to Assignee its entire right, title and interest in and to the Intellectual Property rights in the Semiconductor Patent Applications. Assignor hereby authorizes and requests the Commissioner of Patents of the United States, and any other official of the United States and any country foreign to the United States whose duty it is to issue or record patents, to record assignment of the Semiconductor Patent Applications to Assignee.

(f)

[REDACTED]

[REDACTED]

[REDACTED]

3 [REDACTED]

[REDACTED]

4. [REDACTED]

[REDACTED]

5. [REDACTED]

[REDACTED]

[REDACTED]

6. [REDACTED]

[REDACTED]

7. **General**

This Agreement shall be effective as of the Effective Date hereof and shall be binding on the respective heirs, assigns, representatives, and successors of Assignor and of Assignee.

[the rest of this page intentionally left blank]

Agreed to by:

Micron Technology, Inc.

Signed: \_\_\_\_\_

Date: 9/26/08, 2008

Notarization

State of Idaho

County of Ada

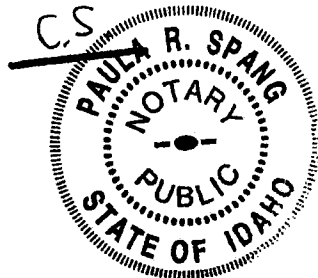
On 9/26/08, before me, Paula R. Spang, personally appeared the above-named Steven R. Appleton

who executed this Assignment in my presence and acknowledged to me that he did so of his own free will and in his authorized capacity for the purposes set forth herein.

Signed: \_\_\_\_\_

My commission expires: 8/12/11

REVIEWED  
MTI LEGAL



Agreed to by:

Aptina Imaging Corporation

Signed: \_\_\_\_\_

Date: 9/26/08, 2008

Notarization

State of Idaho

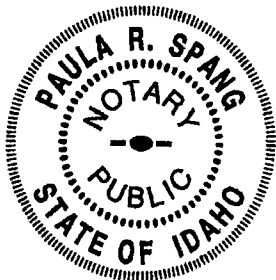
County of Ada

On 9/26/08, before me, Paula R. Spang, personally appeared the above-named Thomas L. Lauer, Jr.

who executed this Assignment in my presence and acknowledged to me that he did so of his own free will and in his authorized capacity for the purposes set forth herein.

Signed: \_\_\_\_\_

My commission expires: 8/12/11



[Signature page to the Patent Assignment Agreement]

**ATTACHMENT "A"**

**IMAGING PATENTS**

## Aptina Issued

PATENT NUMBER	FILE NUMBER	TITLE	COUNTRY NAME	ISSUE DATE
7133076	PBIT-0086.00/US	CONTOURED SURFACE COVER PLATE FOR IMAGE SENSOR ARRAY	United States of America	Nov 7, 2006
7133553	AVGO-0048.00/US	CORRELATION-BASED COLOR MOSAIC INTERPOLATION ADJUSTMENT USING LUMINANCE GRADIENTS	United States of America	Nov 7, 2006
7138197	2002-1174.00/US	METHOD AND APPARATUS FOR TESTING IMAGE SENSORS	United States of America	Nov 14, 2006
7141841	2003-0105.00/US	IMAGE SENSOR HAVING A TRANSISTOR FOR ALLOWING INCREASED DYNAMIC RANGE	United States of America	Nov 28, 2006
7142224	2002-1365.00/US	METHOD FOR MISMATCH DETECTION BETWEEN THE FREQUENCY OF ILLUMINATION SOURCE AND THE DURATION OF OPTICAL INTEGRATION TIME FOR IMAGER WITH ROLLING SHUTTER	United States of America	Nov 28, 2006
7145189	2004-0296.00/US	PHOTON AMPLIFICATION FOR IMAGE SENSORS	United States of America	Dec 5, 2006
7148462	2003-0714.01/US	PIXEL WITH DIFFERENTIAL READOUT	United States of America	Dec 12, 2006
7148528	2003-0106.00/US	PINNED PHOTODIODE STRUCTURE AND METHOD OF FORMATION	United States of America	Dec 12, 2006
7148833	2005-0485.00/US	SHARING OPERATIONAL AMPLIFIER BETWEEN TWO STAGES OF PIPELINED ADC AND/OR TWO CHANNELS OF SIGNAL PROCESSING CIRCUITRY	United States of America	Dec 12, 2006
7151472	PBIT-0158.01/US	REFERENCE VOLTAGE STABILIZATION IN CMOS SENSORS	United States of America	Dec 19, 2006
7151476	2003-1192.00/US	MINIMIZED DIFFERENTIAL SAR TYPE COLUMN WIDE ADC FOR CMOS IMAGE SENSORS	United States of America	Dec 19, 2006
7153719	2004-0386.00/US	METHOD OF FABRICATING A STORAGE GATE PIXEL DESIGN	United States of America	Dec 26, 2006
7154078	2002-0330.01/US	DIFFERENTIAL COLUMN READOUT SCHEME FOR CMOS APS PIXELS	United States of America	Dec 26, 2006
7154136	2003-0343.00/US	ISOLATION STRUCTURES FOR PREVENTING PHOTONS AND CARRIERS FROM REACHING ACTIVE AREAS AND METHODS OF	United States of America	Dec 26, 2006